

APPLICATION SERIAL NO. 09/821,335

PATENT

## AMENDMENTS TO THE CLAIMS

Kindly cancel claim 34 and amend claims 35-44, 46, and 47 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listing, of claims in the application:

*Listing of Claims*

Claims 1 – 34 (canceled)

Claim 35 (currently amended): A system as recited in ~~claim 34, wherein~~ claim 38, wherein the replicated micro-structured optical element has a feature height of less than 10  $\mu\text{m}$ .

Claim 36 (currently amended): A system as recited in ~~claim 34, wherein~~ claim 38, wherein the replicated micro-structured optical element is a transmissive diffractive optical element.

Claim 37 (currently amended): A system as recited in ~~claim 34, wherein~~ claim 38, wherein the replicated micro-structured optical element is a reflective, diffractive optical element.

Claim 38 (currently amended): ~~A system as recited in claim 34, wherein~~ An optical system, comprising:

a stack of at least two optical sheets, at least one of the optical sheets including a surface replicated with both a micro-structured optical element and at least one three-dimensional optical element;

wherein the three-dimensional optical element has a vertical dimension of at least 100  $\mu\text{m}$  relative to a replication base surface.

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Claim 39 (currently amended): A system as recited in ~~claim 34~~, wherein claim 38, wherein the three-dimensional optical element has a vertical dimension of at least 500  $\mu\text{m}$  relative to a base surface.

Claim 40 (currently amended): A system as recited in ~~claim 34~~, wherein claim 38, wherein the three-dimensional optical element has a vertical dimension of at least 1 mm relative to a base surface.

Claim 41 (currently amended): A system as recited in ~~claim 34~~, wherein claim 38, wherein at least one of the optical sheets includes a first surface replicated with at least a first optical element and a second surface replicated with at least a second optical element.

Claim 42 (currently amended): A system as recited in ~~claim 34~~, further claim 38, further comprising one or more spacers interposed within the stack of at least two optical sheets.

Claim 43 (currently amended): A system as recited in ~~claim 34~~, wherein claim 38, wherein at least one of the optical sheets includes an integrated spacer.

Claim 44 (currently amended): A system as recited in ~~claim 34~~, wherein claim 38, wherein an optical path within the stack passes from a first optical element on a first optical sheet to a first optical element on a second optical sheet and to a second optical element on the first optical sheet.

Claim 45 (original): A system as recited in claim 44, wherein the first and second elements on the first optical sheet are on a first surface of the first optical sheet.

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Claim 46 (currently amended): A system as recited in ~~claim 34, further claim 38,~~ further comprising at least one active optical element disposed on one of the optical sheets.

Claim 47 (currently amended): A system as recited in ~~claim 34, further claim 38,~~ further comprising at least one passive optical element attached to a surface of one of the optical sheets.

Claim 48 (previously presented): An optical system, comprising:  
  
a plurality of stacked optical sheets, each of the stacked optical sheets including at least one optical element replicated on a surface,

wherein an optical path within the plurality of stacked sheets passes from a first optical element on a first optical sheet of the plurality of stacked optical sheets to a first optical element on a second optical sheet of the plurality of stacked optical sheets and from the first optical element on the second optical sheet to a second optical element on the first optical sheet.

Claim 49 (original): A system as recited in claim 48, wherein the optical path further passes from the second optical element on the first optical sheet to a second optical element on the second optical sheet.

Claim 50 (original): A system as recited in claim 48, wherein the first and second optical elements on the first optical sheet are on a first surface of the first optical sheet.

Claim 51 (original): An system as recited in claim 48, wherein the first and second optical elements on the first optical sheet are respectively on first and second surfaces of the first optical sheet.

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Claim 52 (original): An system as recited in claim 48, wherein one of the optical sheets includes a surface replicated with a micro-structured optical element.

Claim 53 (original): An system as recited in claim 52, wherein the micro-structured optical element is a reflective diffractive optical element.

Claim 54 (original): An system as recited in claim 52, wherein the micro-structured optical element is a transmissive diffractive optical element.

Claim 55 (original): A system as recited in claim 48, further comprising one or more spacers interposed within the plurality of stacked optical sheets.

Claim 56 (original): A system as recited in claim 48, wherein one of the optical sheets defines a sheet plane and has a surface replicated with an optical element having a dimension of at least 100  $\mu\text{m}$  in a direction perpendicular to the sheet plane.

Claim 57 (original): A system as recited in claim 48, wherein one of the optical sheets defines a sheet plane and has a surface replicated with an optical element having a dimension of at least 500  $\mu\text{m}$  in a direction perpendicular to the sheet plane.

Claim 58 (original): A system as recited in claim 48, wherein one of the optical sheets defines a sheet plane and has a surface replicated with an optical element having a dimension of at least 1 mm in a direction perpendicular to the sheet plane.

Claim 59 (original): A system as recited in claim 48, wherein at least one of the optical sheets includes an integrated spacer.

Claims 60 – 77 (canceled)